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DEEPWATER News

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Deepwater Funding at $724m in FY05 Budget

President Bush signed the Department of Homeland Security Appropriations Act for Fiscal Year 2005 into law on Oct. 18 during a morning ceremony in the Oval Office.

The president said the bill, which provides a 6.6 percent increase in net discretionary spending for homeland security over last year's level, represents a "… strong law that will make the nation more secure."

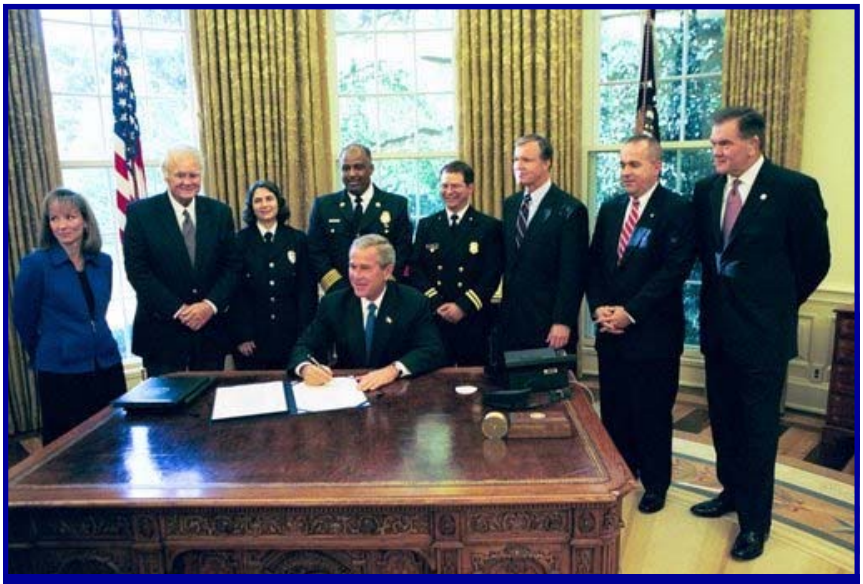
"Our first duty in the war on terror is to protect the homeland," Bush said during a speech in Marlton, N.J., later in the day.

The appropriations bill provides $28.9 billion in net discretionary spending for the Department of Homeland Security, a $1.8 billion increase over 2004 and a $14.9 billion increase (106 percent over 2001 levels.)

The $724 million congressional appropriation for Deepwater [is] $56 million above the FY 2004 appropriation of $668 million.

Secretary of Homeland Security Tom Ridge echoed the president's emphasis on protecting the homeland during a speech to Ohio law-enforcement agencies on Oct. 15.

"The attacks on our country three years ago changed everything for all of us, and yet, in some ways, changed nothing at all," Ridge said.



President George W. Bush signs HR 5467, The Department of Homeland Security Appropriations Act for the Fiscal Year 2005 Tina Hager/White House

"Amid extraordinary challenges, our determination, our courage, and our common purpose remain steadfast."

The new appropriations bill provides $6.3 billion for the Coast Guard for FY 2005, an 8.6 percent ($500 million) increase over 2004, and a 66 percent ($2.5 billion) increase over 2001 levels.

As part of funding for Coast Guard programs, the appropriations bill includes $724 million for the Deepwater multi year acquisition to modernize and recapitalize the Coast Guard's inventory of cutters, aircraft, and supporting systems.

The $724 million congressional appropriation for the Deepwater Program comes to $46 million more than the president's request of $678 million. It is also $56 million above the FY 2004 appropriation of $668 million.

"We recognize and greatly appreciate the strong support demonstrated by the Department of Homeland Security, the administration, and the Congress in advancing Deepwater's urgently needed recapitalization of the Coast Guard," said Rear Adm. Patrick M. Stillman, program executive officer for the Integrated Deepwater System Program.

The FY 2005 appropriation will fund critical Deepwater Program initiatives to develop network-centric C4ISR, continue development of integrated logistics support, recapitalize the Coast Guard's aging inventory of obsolete cutters and aircraft, and modernize aging legacy assets until new platforms enter service in future years.

by Gordon I. Peterson

Coast Guard Students Set Standards for 57mm Gun

Members of the U.S. Coast Guard and U.S. Navy's DD(X) future surface combatant program conducted a day of Human Systems Integration (HSI) testing on the MK 110 Mod 0/57mm gun at the Naval Surface Warfare Center, Dahlgren, Va., Sept. 24.

HIS, the technical process of integrating the five HSI domains including human factors engineering, personnel manpower, training, systems safety, and health hazards, ensures that the following fundamental question is asked early and answered during the acquisition life-cycle process:

"Can these operators, using this equipment, under these conditions, with this training, accomplish their mission?"

To assist in the testing, 16 Coast Guard students and staff members from MK 76 Gun "C" school at Training Center (TraCen) Yorktown, Va., provided the manpower and conducted hands-on training with the new equipment. The students were receiving classroom training on the 76mm gun now in service on legacy cutters.

"Each test team member provided valuable input on every facet of testing and system operation," said Lt. Tim Hackett of the Deepwater Sponsors' Representative office.

"The testing was demanding not only during the test procedure, but also the time between each evolution to collect data.

"Years from now each participant will see improvements made to the 57mm ammunitions container and system loading procedures as a result of their input."

The students who volunteered to assist with the training experienced firsthand the capabilities of the 57mm gun and how it will be help shape the future of the Coast Guard.

Students demonstrate for time the loading and unloading of projectiles for the new 57mm at the Naval Surface Warfare Center in Dahlgren, Va.
USCG/PAC Jeff Murphy

The volunteers manually loaded and unloaded the weapon, demonstrated the ability to control the gun mount using secondary control systems, and confirmed proper operation and procedures for misfire.

"I think it's an incentive to re-enlist," said Gunner's mate PO3 Stephanie Mendola, a crewmember assigned to the Coast Guard Cutter *Gallatin* who is attending the 76mm course at the TraCen.

"The 57mm seems easier to work with since there is a lot more room to work in compared to the 76mm.

"The huge rear door and two side doors really create a lot more light compared to the one small hatch on the 75mm."

Mendola made one suggestion: "Elevate the magazine containers so that a person can reach into the lower and higher containers easily. If the ammunition is too high or low, it is difficult to get the ammo out of the containers."

Gunner's mate PO3 Mike Sanders, stationed aboard the Coast Guard Cutter *Hamilton*, agrees with his classmate.

"I get tired climbing through the hatch on the 76mm gun mount 160 times a day," said Sanders.

"Loading the ammunition is a lot easier. It has to do with the size of the round. It's about half the size of the ammunition of the 76mm.

"However, offloading the ammunition is more of an evolution, but there is a lot more space and efficiency too.

"It only takes up to three people for loading or unloading the 57mm with more room to move compared to seven people loading or unloading the 76mm," said Sanders.

Although the design is new for the Coast Guard, it is not new technology.

"It's an upgraded variation of a WWII gun dating to the

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57mm testing, *from page 2*

1940s," said Gunner's Mate Chief Dan Wilbert, an instructor at Training Center Yorktown, Va.

"One of the items I recommend changing is the warning alarm. It only sounds as the gun moves, but there is no pre-warning sound in case anyone is standing near the gun mount. And when I say the gun moves, I mean it snaps into place fast."

The students from Yorktown glimpsed the next generation of guns for Coast Guard cutters, but in the end, returned to the 76mm school to complete their training.

"This is a huge upgrade from the 76mm," said Gunner's mate PO3 Robert Boyer, stationed at the Armory Department in Ketchikan, Alaska.

"As far as maintenance and accuracy of the new weapon, the all-around ability is a lot easier to handle compared to our current armament," said Boyer. "I'll definitely look forward to working on the 57mm gun."

While the TraCen team trained on the 57mm gun, members from the U.S. Navy DD(X) Close-In Gun System also watched the testing very closely.

Five members from the Navy expressed key interest in the abilities of the 57mm gun.

This Coast Guard and Navy personnel teaming effort ensured a safe training environment, and afforded an opportunity to exchange ideas concerning the capabilities of the gun.

by PAC Jeff Murphy

Deepwater on Display at "Sea Shield" Conference

Two years ago, Chief of Naval Operations Adm. Vern Clark postulated the concept of "Sea Shield" as part of his *Sea Power 21* naval vision--a future in which naval forces will provide the United States with sea-based theater and strategic defense. "Traditionally, naval defense has protected the unit, the fleet, and the sea lines of communication," Clark wrote in the Naval Institute's *Proceedings* magazine. "Tomorrow's Navy will do much more."

So too will tomorrow's U.S. Coast Guard do much more when it is recapitalized through the Integrated Deepwater System.

A modern, transformed Coast Guard will bring new and important capabilities to the fore in all of its multiple missions. This transformation has important implications for the Coast Guard, the nation, and U.S. naval power in the post-9/11 era.

That was the message that Capt. Douglas Russell, Deepwater's program manager, told an audience of approximately 200 naval officers and industry representatives at a "Sea Shield" Conference in Arlington, Va, organized by the Global Defense Institute. "Since 9/11, our maritime challenges have changed," Russell said. "Today's asymmetric threats mean that our world of work in the Coast Guard also has changed in many ways."

In addition to its traditional missions in marine safety, law enforcement, environmental protection, and fisheries enforcement, the Coast Guard's responsibilities for homeland security and homeland defense have grown exponentially since 9/11.

Deepwater's additional capabilities and capacity are critical to the Coast Guard's ability to sustain mission performance into the 21st century in nearly all of these multimissions. As Coast Guard Commandant Adm. Thomas H. Collins noted recently, "Deepwater *is* the future of the Coast Guard."

The Coast Guard, with statutory responsibilities for both homeland security as well as homeland defense, is the one branch of the U.S. armed forces that straddles the seam between each mission area. For this reason, it is imperative that its cutters, aircraft, and systems are seamlessly interoperable with other federal agencies, the Navy, and local authorities.

"C4ISR is the backbone to do Sea Shield right," Russell said, in describing Deepwater's system for command, control, communications, computers, intelligence, surveillance, and reconnaissance.

In describing the purpose and scope of Deepwater's system-of-systems recapitalization, Russell described for the audience the status of each program in the surface, air, C4ISR, and integrated logistics domains.

He noted the important cooperation existing between the Coast Guard and the Navy in developing compatible, complementary platforms and system through the Deepwater Program and the Navy's Littoral Combat Ship program in support of the National Fleet policy.

"We can--and will--work as one fleet," he said. "Passing information through our C4 architecture is the bottom line to make it possible."

by Gordon I. Peterson

Recapitalized CGC Matagorda Experiences Hull Damage

CGC Matagorda experienced hull plate damage on Sept. 11 while transiting between Key West and Miami, Fla. to evade Hurricane Ivan.

The crew's post-transit inspection revealed a starboard side hull plate had stoved-in outboard the engine room ventilation louvers. The inspection further showed evidence of a six-inch long crack in the main deck plating forward of the newly installed superstructure.

The six-inch crack was repaired by Miami NESU welders and the hull was temporarily strengthened by welding steel beams in the affected area.

Because the cause of the damage was unknown, the Atlantic Area Commander placed operational restrictions on the four 123-foot patrol boats, allowing them to get underway only in an emergency.

To address the hull issue, the Coast Guard and industry partner Integrated Coast Guard Systems (ICGS) worked together to determine the cause of the damage as well as the proposed corrective action.

Numerous assessment steps were taken including the performance of a Finite Element Analysis (FEA) of the Matagorda.

The analysis involved a computer-constructed model of the Matagorda using small building blocks. Applying loads to the various "blocks" of the Matagorda enabled the prediction of stresses and deflections in the overall structure.

Based on the damage sustained and the results of the FEA, a two-pronged structural repair plan for the Matagorda was developed to repair the buckled hull plating as well as the implementation of the structural enhancements identified as a result of the finite element analysis.

The CGC Matagorda was the first of the 110-foot Island Class Patrol Boats to be converted to a 123-foot vessel as part of the Deepwater Program. The Coast Guard is currently ascertaining the reasons for the cutter's recent hull damage, and the appropriate way ahead. United States Coast Guard Photo

The CGC Matagorda returned to Bollinger Shipyards where repairs are currently underway and expected to be completed by 18 December, at which time the cutter will return to Key West.

Recently converted and lengthened from a 110-foot to a 123-foot patrol boat as part of the Deepwater Program, the Matagorda is undergoing post-conversion test and evaluation.

The hulls of the 110-foot Island Class patrol boats have experienced structural problems throughout their life and, in recent years, significant hull degradation.

As a result, the Coast Guard has moved forward with the design and construction of the Maritime Patrol Coastal (WPC, formerly known as the Fast Response Cutter) that is ultimately slated to replace the Island Class Patrol Boats.

At this time, the planned conversion of additional 110-foot patrol boats to recapitalized 123-foot vessels such as the CGC Matagorda have been put on hold.

The final results of all post-event tests and evaluations, and the determinations of Coast Guard and ICGS personnel, among others, will bear on the Coast Guard's final decision whether to continue the program of 110-foot to 123-foot patrol boat conversions or not.

by LCDR Andrea Palermo and Terry Prokes